

EXHIBIT 2

FILED UNDER SEAL

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

WAYMO LLC,

Plaintiff,

vs.

No. 3:17-cv-00939-WHA

UBER TECHNOLOGIES, INC.;

OTTOMOTTO LLC; OTTO TRUCKING,

INC.,

Defendants.

-----/

WAYMO & UBER CONFIDENTIAL ATTORNEYS' EYES ONLY

VIDEOTAPED DEPOSITION OF GREGORY KINTZ

SAN FRANCISCO, CALIFORNIA

WEDNESDAY, APRIL 26, 2017

BY: ANDREA M. IGNACIO, CSR, RPR, CRR, CCRR, CLR ~

CSR LICENSE NO. 9830

JOB NO. 2592507

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1 Q Okay. What do you mean by that? 11:44

2 A Well, [REDACTED] [REDACTED]

3 [REDACTED], but 11:44

4 does not have to be. 11:45

5 Q Okay. In what instances would it [REDACTED] [REDACTED]

6 [REDACTED] 11:45

7 A Using general principles, it would be 11:45

8 [REDACTED] [REDACTED]

9 [REDACTED] 11:45

10 Q And under what circumstances would it [REDACTED] [REDACTED]

11 [REDACTED] 11:45

12 A There may be cases where you might want to 11:45

13 [REDACTED] [REDACTED] [REDACTED]

14 [REDACTED] [REDACTED]

15 [REDACTED] you could do that. 11:45

16 Q Okay. But generally, if you're looking to 11:45

17 [REDACTED] [REDACTED]

18 [REDACTED] [REDACTED]

19 [REDACTED] [REDACTED]

20 [REDACTED] correct? 11:46

21 MR. JAFFE: Objection; form. 11:46

22 THE WITNESS: Correct. 11:46

23 MR. KIM: Q. So, taking a look at this 11:46

24 diagram, I see on page 15 of Exhibit 1034, there is 11:46

25 [REDACTED] 11:46

1 Using the Fuji [REDACTED] information, I 11:47
2 was able to determine [REDACTED] [REDACTED]
3 [REDACTED]. And, from that, I was able to 11:47
4 [REDACTED] 11:47
5 Q Okay. And that's [REDACTED] [REDACTED]
6 [REDACTED] [REDACTED]
7 [REDACTED] -- on the bottom of page 5? 11:48
8 A That is 15? 11:48
9 Q Yes. 11:48
10 A Yes. 11:48
11 Q Okay. And after [REDACTED] [REDACTED]
12 [REDACTED] [REDACTED]
13 [REDACTED] [REDACTED]
14 [REDACTED] 11:48
15 A Using the -- again, the same [REDACTED] 11:48
16 file from the Fuji board in the [REDACTED] e-mail, that 11:48
17 also contains [REDACTED] 11:48
18 And I was able to [REDACTED] [REDACTED]
19 [REDACTED] [REDACTED]
20 [REDACTED] 11:49
21 MR. KIM: Okay. Let's go ahead and mark this 11:49
22 as No. 1037. 11:49
23 (Document marked Exhibit 1037 11:49
24 for identification.) 11:49
25 MR. KIM: Q. Do you recognize Exhibit 11:49

1 [REDACTED] [REDACTED]
[REDACTED], what did you do next? 12:01
3 A I then compared [REDACTED] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] Excuse me. 12:02
8 Q And the [REDACTED] 12:02
9 A Correct. 12:02
10 Q Okay. And that's based on your calculation 12:02
11 of [REDACTED] for the 12:02
12 Fuji board; correct? 12:02
13 A That is correct. 12:02
14 Q So, is it fair to say that if your 12:02
15 calculation of [REDACTED] for Fuji 12:02
16 was incorrect, that [REDACTED] would also be different; 12:02
17 correct? 12:02
18 A Yes. 12:02
19 Q I'd like to turn to -- back to the reply 12:02
20 declaration. 12:03
21 A (Witness complies.) 12:03
22 Uh-huh. 12:03
23 Q And direct your attention to paragraph 5. Do 12:03
24 you see where it says: 12:03
25 "My visual inspection of the Fuji device on 12:03

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A F T E R N O O N S E S S I O N

1:05 P.M.

THE VIDEOGRAPHER: We are back on the record at 1:05 p.m.

MR. KIM: Q. Mr. Kintz, we were talking about [REDACTED] And I wanted to ask you what you meant by [REDACTED] in your declaration, for example, in paragraphs 4 and 5 which we had been discussing.

A The definition of [REDACTED]

Q Okay. And so, if [REDACTED]

A Yes, I would agree with that statement.

Q Okay. And is it also your testimony that if [REDACTED]

MR. JAFFE: Excuse me. Objection; form.

THE WITNESS: In a more broad definition of [REDACTED]

1 [REDACTED] yes, that would. 13:07

2 I believe, in the context of the Trade Secret 13:07

3 that we're discussing right now, no, because that 13:07

4 [REDACTED] 13:07

5 MR. KIM: Q. So, just to make sure I -- I 13:07

6 understand your answer, if you had [REDACTED] [REDACTED]

7 [REDACTED] [REDACTED]

8 [REDACTED] [REDACTED]

9 [REDACTED] [REDACTED]

10 [REDACTED] [REDACTED]

11 [REDACTED] [REDACTED]

12 [REDACTED] [REDACTED]

13 [REDACTED] 13:08

14 A Yes. 13:08

15 MR. JAFFE: Objection; form. 13:08

16 Just give me a second to object, please. 13:08

17 THE WITNESS: Yeah. 13:08

18 MR. JAFFE: Thank you. 13:08

19 THE WITNESS: Yes, within the context of your 13:08

20 statement, yes. 13:08

21 MR. KIM: Okay. So I'd like to mark this as 13:08

22 1038, I believe. 13:08

23 (Document marked Exhibit 1038 13:09

24 for identification.) 13:09

25 MR. KIM: Q. Do you recognize Exhibit 1038? 13:09

1 your objection. Please stop, or we'll move to strike 14:12
2 his declaration. 14:12
3 MR. JAFFE: I'm going to just object again. 14:12
4 MR. KIM: That's under your interpretation of 14:12
5 Judge Alsup's standing order. I'm warning you, stop. 14:12
6 MR. JAFFE: I disagree. 14:12
7 MR. KIM: Q. Can you answer the question? 14:12
8 A To successfully produce this document here, I 14:12
9 needed to have the [REDACTED] between the 14:12
10 Waymo boards and the Fuji board. 14:13
11 So I did compute [REDACTED] [REDACTED]
12 [REDACTED] in preparing this figure. 14:13
13 Q Did you quantify or calculate the 14:13
14 correspondence between [REDACTED] [REDACTED]
15 [REDACTED] 14:13
16 MR. JAFFE: Objection; form. 14:13
17 THE WITNESS: So at the time I had -- did 14:13
18 this analysis, I had the [REDACTED] data for the 14:13
19 one Fuji board, and I had the [REDACTED] from 14:13
20 the Waymo boards. 14:13
21 [REDACTED] [REDACTED] [REDACTED]
22 [REDACTED] [REDACTED]
23 [REDACTED] 14:14
24 MR. KIM: Q. What are the scaling 14:14
25 differences you're referring to? 14:14

1 your report; correct? 14:15

2 A The Excel spreadsheet that did that 14:15

3 calculation was part of a set of files that I used and 14:15

4 prepared for the original declaration. 14:15

5 Q Are they mentioned in your declaration? 14:15

6 A Insomuch as there is a computed calculation 14:15

7 here. 14:15

8 Q But where -- where is that spreadsheet 14:15

9 referenced in the list of materials considered? 14:15

10 MR. JAFFE: Objection; form. 14:15

11 THE WITNESS: It was a simple derivation of 14:15

12 the assembly and fabrication documents that were 14:16

13 provided as part of the Fuji PCB. 14:16

14 MR. KIM: So Counsel, we request that those 14:16

15 spreadsheets that he relied on in preparing his 14:16

16 declaration be produced immediately. 14:16

17 MR. JAFFE: So just to briefly respond, I 14:16

18 don't think that's a fair summary of what he just 14:16

19 testified about. But we'll take your request under 14:16

20 advisement. 14:16

21 MR. KIM: Q. Mr. Kintz, Waymo didn't come up 14:17

22 with the idea of having 64 diodes in a LiDAR; correct? 14:17

23 A No. That existed out in the public domain. 14:17

24 MR. JAFFE: So just as a brief question here, 14:17

25 if you're changing topics, if you don't mind if we 14:17

1 discover the use of a fast-axis collimation lens in 14:30
2 the context of LiDARs? 14:30
3 MR. JAFFE: Objection; form. 14:30
4 THE WITNESS: I'm aware of people using 14:30
5 fast-axis collimation lenses in a wide range of laser 14:30
6 diode collimation systems. 14:31
7 MR. KIM: Q. The Velodyne 64, in fact, used 14:31
8 FAC lenses in front of its diodes; correct? 14:31
9 A Based on the information that is presented in 14:31
10 Figure 7, it appears that they use a fast-axis lens. 14:31
11 Q And do you see the fast-axis collimation lens 14:31
12 in Figure 7? 14:31
13 A Yes. 14:31
14 Q Okay. Can you label that, please. You can 14:31
15 just -- you can label it "FAC" for short. 14:31
16 A (Witness complies.) 14:31
17 Okay. 14:31
18 Q Okay. And you're understanding that for the 14:31
19 Velodyne 64, the purpose of that FAC lens would be to 14:31
20 pre-collimate the light emitted from the laser diode; 14:31
21 correct? 14:32
22 A Correct. 14:32
23 Q And would it also be for the purpose of 14:32
24 [REDACTED] [REDACTED]
[REDACTED] 14:32

1 inspected. 14:40

2 What's the benefit of having [REDACTED] [REDACTED]

3 [REDACTED] for the GBr3 board? 14:41

4 A [REDACTED] [REDACTED]

5 [REDACTED] [REDACTED]

6 [REDACTED] [REDACTED]

7 [REDACTED] 14:41

8 Q And what other benefit is there for having a 14:41

9 [REDACTED] for the GBr3? 14:41

10 A For the GBr3 specifically, the benefit is 14:41

11 associated with [REDACTED] [REDACTED]

12 [REDACTED] 14:41

13 Q Okay. And what other benefits are there for 14:41

14 the GBr3? 14:42

15 A I am not aware of any other benefits for the 14:42

16 GBr3 board at this time. 14:42

17 Q And are those -- so I -- I heard two primary 14:42

18 benefits for having [REDACTED] for the 14:42

19 GBr3; is that fair? 14:42

20 A Yes. 14:42

21 Q Would those two benefits also apply if you 14:42

22 had [REDACTED] 14:42

23 A Yes. 14:42

24 Q Would they apply if you had [REDACTED] [REDACTED]

25 [REDACTED] 14:42

1 [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] correct? 14:45
4 A I actually -- 14:45
5 MR. JAFFE: Sorry. Objection; form. 14:45
6 Go ahead. 14:45
7 THE WITNESS: Actually, I disagree. 14:45
8 [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 14:45
11 So it's clear that even [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 14:45
14 MR. KIM: Q. So would [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 14:46
17 A Yes, under all of the considerations of the 14:46
18 [REDACTED] [REDACTED]
[REDACTED] [REDACTED], yes. 14:46
20 Q And assuming that [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 14:46
24 correct? 14:46
25 A Yes, given those mathematical assumptions. 14:46

1 Q So if you can turn to your -- the Trade 14:47
2 Secret List that we've been referring back to, Trade 14:47
3 Secret No. 7. 14:47
4 A (Witness complies.) 14:47
5 Yes. 14:47
6 Q It's not your testimony that Trade Secret 7 14:48
7 requires [REDACTED] is it? 14:48
8 A [REDACTED] [REDACTED]
9 [REDACTED] 14:48
10 Q But it doesn't say [REDACTED] 14:48
11 correct? 14:48
12 A No, there is no [REDACTED] [REDACTED]
13 [REDACTED] 14:48
14 It's just surprising that [REDACTED] [REDACTED]
15 [REDACTED] [REDACTED]
16 [REDACTED] 14:48
17 Q How do you know that [REDACTED] [REDACTED]
18 [REDACTED] 14:48
19 A I was told that -- or that information is in 14:49
20 one of the declarations of one of the Waymo engineers. 14:49
21 Q And you relied on that declaration? 14:49
22 A Yes. 14:49
23 Q Do you know whose? 14:49
24 A I can pull that up because that's referenced 14:49
25 in my -- let's see -- in my second declaration. 14:49

1 declaration, paragraph 40. And actually, let's move 15:03
2 ahead to paragraph 43. 15:03
3 A (Witness complies.) 15:03
4 Q Do you see in the first sentence where you 15:04
5 say: 15:04
6 "Moreover, both Liu and Schultz dissertation 15:04
7 teach away from [REDACTED]." 15:04
8 A Yes. 15:04
9 Q What is a [REDACTED] 15:04
10 A Depending on the application of the laser 15:04
11 diode, either single emitter device or laser diode 15:04
12 bar, [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 15:04
16 Q For the GBr3, what would be [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 15:04
18 MR. JAFFE: Objection; form. 15:04
19 THE WITNESS: Without having gone through 15:05
20 computations of the -- [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 15:05
24 However, in the deposi- -- in the 15:05
25 declarations of the Google engineer, Pierre Droz, they 15:05

1 Q What about [REDACTED] 15:07

2 A Again, you're asking me to do calculations 15:07

3 that I don't have information available to me in terms 15:07

4 of the detailed design properties of the system. 15:07

5 Q You know, earlier we were looking at the 15:07

6 Trade Secret No. 7, and you confirmed there was no 15:07

7 requirement of [REDACTED] 15:07

8 Do you recall that? 15:07

9 A Yes. 15:08

10 Q Where does it say in Trade Secret 7 that the 15:08

11 [REDACTED]? 15:08

12 A The significance in the Trade Secret is the 15:08

13 [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] 15:08

17 Q But where does it [REDACTED] [REDACTED]

[REDACTED] [REDACTED] 15:09

19 A Trade Secret No. 7 doesn't have [REDACTED] [REDACTED]

[REDACTED] [REDACTED] 15:09

21 (Document marked Exhibit 1048 15:09

22 for identification.) 15:09

23 MR. KIM: Okay. I'd like to hand you 15:09

24 deposition Exhibit No. 140 -- 1048. 15:09

25 MR. JAFFE: Can I get a copy, please? 15:09

1 Q So it seems to be distinguishing the 16:04
2 '190 patent disclosure and possibly the PanDAR 16:04
3 paper -- it's unclear -- on the grounds that what's 16:04
4 disclosed in the '190 patent and/or the PanDAR paper 16:05
5 is not a single device. 16:05

6 And my question is: Earlier when we were 16:05
7 discussing the PanDAR device, you had mentioned that 16:05
8 it was two stacked Velodynes; right? 16:05

9 And I think that's depicted in Figure 1 which 16:05
10 we were talking about earlier. 16:05

11 A Yes. 16:05

12 Q So -- so with the understanding that PanDAR 16:05
13 is describing what you described as two separate 16:05
14 devices stacked on top of each other -- 16:05

15 A Well, actually, I think we can look at the 16:05
16 photograph -- 16:05

17 Q Yeah. 16:05

18 A -- on Figure 1 and see -- 16:05

19 Q Yeah, that's what I'm looking at, too. 16:05

20 A -- that it is a single device that has two 16:05
21 optical subsystems on it. 16:05

22 Q Oh, you would characterize this as a single 16:05
23 device? 16:05

24 A This is the PanDAR system that is a single 16:05
25 device. 16:05

1 [REDACTED] [REDACTED] [REDACTED]
2 [REDACTED] [REDACTED]
3 [REDACTED] 16:10
4 So again, I have to say necessarily because 16:10
5 it may not be a straightforward task to reduce that to 16:10
6 a single device. 16:10
7 MR. KIM: Q. Wouldn't it be fairly simple to 16:10
8 just arrange the boards that are distributed across 16:10
9 two optical cavities in the PanDAR device into a 16:11
10 single cavity? 16:11
11 MR. JAFFE: Objection; form. 16:11
12 THE WITNESS: Without knowing the internal 16:11
13 details of the -- of the 32-unit Velodyne systems, 16:11
14 that may or may not be possible. 16:11
15 But we can actually look at the Velodyne 16:11
16 '190 patent and see that there's not a lot of room 16:11
17 between their current set of emitters to just add more 16:11
18 boards. 16:11
19 MR. KIM: Okay. 16:11
20 Q Aside from space constraints, what else would 16:11
21 prevent you from just adding more boards in a single 16:11
22 cavity? 16:11
23 A Well, two other areas that immediately jump 16:11
24 out at me as an engineer. 16:12
25 [REDACTED] [REDACTED] 16:12

1 [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 16:12
8 Q What else? 16:12
9 A We mentioned [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 16:12
11 Q What about optically? 16:12
12 You wouldn't have to recalculate all the [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] right? 16:12
15 You could just take [REDACTED] [REDACTED]
[REDACTED] [REDACTED], and apply it to a single cavity? 16:13
17 MR. JAFFE: Objection; form. 16:13
18 THE WITNESS: So you're really making a very 16:13
19 hypothetical situation right now, and now detailed 16:13
20 designs that's unclear to me whether I can make an 16:13
21 accurate conclusion on this. 16:13
22 It not only depends on [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 16:13

1 So I don't think there is a clear answer to 16:13
2 your question. 16:13
3 MR. KIM: Q. It wouldn't be a simple 16:13
4 modification to just go from these two separate 16:13
5 cavities and to put all 64 boards and diodes into a 16:13
6 single cavity? 16:13
7 MR. JAFFE: Objection; form. 16:14
8 THE WITNESS: Again, I don't -- with all of 16:14
9 the complexity of engineering, I don't think you can 16:14
10 make a broad brush statement that says, Oh, this would 16:14
11 just be a simple thing to do. 16:14
12 MR. KIM: Q. So GBr3 has [REDACTED] [REDACTED]
13 [REDACTED]; correct? 16:15
14 A Yes, that's correct. 16:15
15 Q And it has a single optical cavity? 16:15
16 A Yes, that's correct. 16:15
17 Q And the [REDACTED] for GBr3, 16:15
18 that's [REDACTED]? 16:15
19 A That sounds correct. But I would prefer to 16:15
20 look at a detailed specification to confirm that 16:15
21 number. 16:16
22 Q All right. 16:16
23 I think you can go to the list of Trade 16:16
24 Secrets and turn to -- let's see -- page 25. 16:16
25 A Okay. Nope, I don't need that anymore. 16:16

1 line 52, where it says: 16:30

2 "In some examples, each light source of the 16:30

3 plurality of light sources includes a respective lens, 16:30

4 such as a cylindrical or acylindrical lens. The light 16:30

5 source may emit an uncollimated light beam that 16:31

6 diverges more in a first direction than in a second 16:31

7 direction. In these examples, the light source's 16:31

8 respective lens may pre-collimate the uncollimated 16:31

9 light beam in the first direction to provide a 16:31

10 partially collimated light beam, thereby reducing the 16:31

11 divergence in the first direction." 16:31

12 Do you see that? 16:31

13 A I do see that. 16:31

14 Q Doesn't that describe a cylin- -- use of a 16:31

15 cylindrical or acylindrical FAC lens with a laser 16:31

16 diode? 16:31

17 A Yes, it does. 16:31

18 Q And here it refers to cylindrical or 16:31

19 acylindrical. 16:31

20 Do you know what the difference is between a 16:31

21 cylindrical and an acylindrical lens? 16:31

22 A The use in the patent of the terminology 16:31

23 "acylindrical" is not standard for optics. Normally, 16:32

24 the optical design program -- or a common optical 16:32

25 design program, Zemax, would refer to that as a 16:32

1 toroid-shaped lens. 16:32

2 Q Yet you're referring to an acylindrical -- 16:32

3 A Correct. 16:32

4 Q -- shape? 16:32

5 So just to make sure I've got the terminology 16:32

6 right, an acylindrical FAC lens would be toroidal? 16:32

7 A And just to be specific, the definition of 16:32

8 toroidal means that the radius of curvature in one 16:32

9 principal direction is different than the radius of 16:32

10 curvature in the other principal direction. 16:32

11 Q Okay. And a cylindrical FAC then would be 16:32

12 non-toroidal; is that fair? 16:32

13 A Yes. It's the limit where one of the axes is 16:32

14 constant cross section and has no radius of curvature, 16:33

15 and the other one has a radius of curvature. 16:33

16 Q And you can define a acylindrical shape 16:33

17 through a mathematical equation; correct? 16:33

18 A That's correct. 16:33

19 Q And an acylindrical shape can be defined 16:33

20 through the use of a polynomial? 16:33

21 A Correct. 16:33

22 Q Whereas a cylindrical shape would not be 16:33

23 defined by a polynomial; correct? 16:33

24 A In the one axis where there is curvature, 16:33

25 that axis is actually usually defined by a polynomial. 16:33

1 MR. KIM: Okay. 17:12

2 Q So this patent discloses the use of holes, 17:12

3 tapered pins, screws, and cam surfaces, all four of 17:12

4 those, [REDACTED]; correct? 17:12

5 A That is correct. 17:12

6 Q Okay. You can put that aside. 17:12

7 So I believe earlier you testified that it's 17:13

8 your understanding that the manufacturing tolerances 17:13

9 for GBr3 is [REDACTED]? 17:13

10 MR. JAFFE: Objection; form. 17:13

11 THE WITNESS: Can you point to either in my 17:13

12 declaration or -- 17:13

13 MR. KIM: Q. I thought you said that during 17:13

14 the deposition, but you also said in paragraph 50 of 17:13

15 your reply brief. 17:13

16 A Okay. 17:13

17 MR. JAFFE: Are you talking about the reply 17:13

18 brief, you said? 17:13

19 MR. KIM: The reply declaration. 17:13

20 THE WITNESS: Okay. 17:14

21 (Complies.) 17:14

22 Yes. And this specifically references the 17:14

23 [REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED] 17:14

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

17:14

MR. KIM: Q. So if there's a [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

17:15

A [REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

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17:16

1 Q Now, the use of a [REDACTED] [REDACTED]
[REDACTED] that's known in the 17:22
3 public; right? 17:22
4 MR. JAFFE: Objection; form. 17:22
5 THE WITNESS: There are many applications of 17:22
6 [REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] 17:22
10 MR. KIM: Q. And it's also known that you 17:22
11 could use [REDACTED] [REDACTED]
[REDACTED] 17:22
13 correct? 17:22
14 MR. JAFFE: Objection; form. 17:22
15 THE WITNESS: Yes. There are certainly 17:22
16 references in the public domain that discuss the 17:22
17 [REDACTED] [REDACTED]
[REDACTED] 17:23
19 MR. KIM: Q. For a LiDAR application; 17:23
20 correct? 17:23
21 A For a LiDAR application. 17:23
22 Q Okay. So the use of [REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] that's not a Trade 17:23
25 Secret; right? 17:23

1 A Right here. 17:26

2 Q You're referring to [REDACTED] 17:26

3 A [REDACTED] yes. 17:26

4 Q Okay. Let's move on to paragraph 58 in your 17:26

5 reply declaration. 17:27

6 A (Witness complies.) 17:27

7 Yes. 17:28

8 Q So Trade Secret 10 is: 17:28

9 [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] 17:28

15 A That's correct. 17:28

16 Q What's the [REDACTED] 17:28

17 covered by Trade Secret 10? 17:28

18 A It's the [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] 17:28

22 Q Now, I'm -- I want to know about the 17:29

23 [REDACTED] 17:29

24 [REDACTED] [REDACTED]

[REDACTED] [REDACTED] that you're referring to? 17:29

1 Q Now, you said earlier [REDACTED] [REDACTED]
[REDACTED]
[REDACTED] right? 17:31
4 A That's right. So just to be specific, a 17:31
5 [REDACTED]
[REDACTED]
[REDACTED] 17:31
8 Q Okay. So who is [REDACTED] for 17:31
9 Waymo? 17:31
10 A I know they're a [REDACTED] and -- oh, 17:31
11 yes, [REDACTED] 17:31
12 Q Okay. So I'm a little confused, because in 17:31
13 Trade Secret -- the Trade Secret List, page 8, it 17:31
14 says: 17:31
15 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] 17:32
20 Do you see that? 17:32
21 A You're on page 8? 17:32
22 Q Page 8. 17:32
23 A And Trade Secret -- 17:32
24 Q 10. 17:32
25 A -- 10. 17:32

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1 MR. JAFFE: Same objection. 17:39

2 THE WITNESS: Again, I'm not aware of any 17:39

3 other person using plastic FAC lenses in any 17:39

4 application. 17:39

5 MR. KIM: Q. Can you turn to the '922 patent 17:39

6 that we looked at previously. 17:41

7 A (Witness complies.) 17:41

8 Uh-huh. 17:41

9 Q Direct your attention to paragraph -- 17:41

10 column 15, line approximately 50. 17:41

11 Do you see that? 17:41

12 A Yes. 17:41

13 Q So it says: 17:41

14 "In one example, cylindrical lens 504 is a 17:41

15 microrod lens with a diameter of about 600 microns 17:41

16 that is placed about 250 microns in front of aperture 17:41

17 506. The material of the microrod lens could be, for 17:41

18 example, fused silica or a borosilicate crown glass, 17:41

19 such as Schott BK7." 17:41

20 It goes on to say: 17:42

21 "Alternatively, the microrod lens could be a 17:42

22 molded plastic cylinder or acylinder." 17:42

23 Do you see that? 17:42

24 A I do. 17:42

25 Q So it's known in the public that you could 17:42

1 have a molded plastic FAC lens for use with a diode in 17:42
2 a LiDAR; correct? 17:42
3 A Yes. The -- there could be a molded glass 17:42
4 lens. 17:42
5 However, the Trade Secret really here that 17:42
6 we're talking about is [REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED] 17:42
9 Q Where does it talk about [REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED] 17:43
12 MR. JAFFE: Objection; form. 17:43
13 THE WITNESS: Well, the -- the Trade Secret 17:43
14 [REDACTED] 17:43
15 MR. KIM: Q. And I thought we had previously 17:43
16 discussed that in this list of Trade Secrets, it's 17:43
17 just the last bullet that defines the scope of the 17:43
18 Trade Secret? 17:43
19 A Yes. 17:43
20 Q Do you recall that? 17:43
21 A Yes. 17:43
22 Q Okay. Is there anything in that last bullet 17:43
23 that talks about [REDACTED] [REDACTED]
[REDACTED] [REDACTED] 17:43
25 A No. 17:43

1 Q Do you see any description there of any 17:43
2 [REDACTED]? 17:43
3 A No. 17:43
4 Q Did you opine on Trade Secret No. 19? 17:43
5 A Yes. 17:44
6 Q So again, the scope of Trade Secret 19 is 17:44
7 defined by that last bullet point; correct? 17:44
8 A Correct. 17:45
9 Q And so the Trade Secret is [REDACTED] [REDACTED]
10 [REDACTED]; is that right? 17:45
11 MR. JAFFE: Objection; form. 17:45
12 THE WITNESS: There's more to the Trade 17:45
13 Secret. The Trade Secret claimed is: 17:45
14 [REDACTED] [REDACTED]
15 [REDACTED] [REDACTED]
16 [REDACTED] [REDACTED]
17 [REDACTED] [REDACTED]
18 [REDACTED] [REDACTED]
19 [REDACTED] [REDACTED]
20 [REDACTED] 17:45
21 MR. KIM: Q. So the Trade Secret doesn't 17:45
22 specify any particular type of [REDACTED]; 17:45
23 correct? 17:46
24 A No. 17:46
25 Q And you're aware of vendors who sell [REDACTED] 17:46

1 diagrams? 18:54

2 MR. JAFFE: Same objection. 18:54

3 THE WITNESS: As I just stated, without 18:54

4 knowing the internal circuitry of the components that 18:54

5 are listed as MC40F10YMME, and whether or not that 18:54

6 internal device contains inductors or inductor-like 18:54

7 devices, I cannot make a determination. 18:54

8 MR. KIM: Okay. 18:54

9 Q You said you reviewed the 14,000 files 18:54

10 downloaded by Mr. Anthony Levandowski in preparation 18:54

11 for finalizing your opening declaration; correct? 18:54

12 A That is correct. 18:54

13 Q When you reviewed those 14,000 files, you 18:54

14 didn't see [REDACTED] [REDACTED]

15 [REDACTED] did you? 18:55

16 MR. JAFFE: Objection; form. 18:55

17 THE WITNESS: The files that were downloaded 18:55

18 by Andrew Levandowski included a wide range of laser 18:55

19 programs at Google Waymo, one being [REDACTED] [REDACTED]

20 [REDACTED] 18:55

21 However, the information is limited to the 18:55

22 electrical schematics of the system and did not have 18:55

23 any information on the optical configurations. 18:55

24 MR. KIM: Okay. 18:55

25 Q So that would be -- you -- you didn't see any 18:55

1 schematics for a LiDAR design with eight optical 18:55
2 cavities? 18:55
3 A No, I did not. 18:55
4 Q And you didn't see any schematics for a LiDAR 18:55
5 design that had 16 collimation lenses? 18:55
6 MR. JAFFE: Objection; form. 18:56
7 THE WITNESS: Again, the schematic files are 18:56
8 electrical files, not optical files. So there was no 18:56
9 information on lenses or optics. 18:56
10 MR. KIM: Q. And you didn't see any 18:56
11 schematics that showed a diode-based design with 18:56
12 multiple diodes on a board with separate transmit and 18:56
13 receive lenses? 18:56
14 MR. JAFFE: Objection; form. 18:56
15 THE WITNESS: In the laser subdirectory of 18:56
16 the files downloaded by Andrew Levandowski, there were 18:57
17 multiple laser projects with the schematic information 18:57
18 on those, but not the optical information. 18:57
19 So even though there were a wide range of 18:57
20 files downloaded on a wide range of laser radar 18:57
21 systems, there was not specific optical information 18:57
22 that would allow me to answer that I did see this 18:57
23 configuration. 18:57
24 MR. KIM: Q. Mr. Kintz, the Spider doesn't 18:57
25 practice any of the Trade Secrets in your opening 18:57

1 declaration; correct? 18:57

2 A No, not that I'm aware of. 18:58

3 Q Okay. Going back to -- yeah. I think 18:58

4 earlier we were talking about [REDACTED] [REDACTED]

5 [REDACTED] 18:58

6 Do you recall that discussion? 18:58

7 A I do. 18:58

8 Q And at one point we were talking about a 18:58

9 reference that disclosed, in addition to the use of 18:58

10 guide holes, also the use of screws. 18:58

11 Do you recall that? 18:58

12 A Yes. 18:58

13 Q The use of screws to position PCB boards, 18:58

14 that was well known in the public; correct? 18:58

15 MR. JAFFE: Objection; form. 18:58

16 THE WITNESS: In this case, the screws had a 18:59

17 definitive function that is well beyond the normal use 18:59

18 of screws to just hold them down on a set of 18:59

19 standoffs. 18:59

20 In this case, the screws had a function as -- 18:59

21 wrong patent. Wrong patent. 18:59

22 MR. KIM: Let me just ask you a new question. 18:59

23 Q In your opinion, people would know that you 18:59

24 could position a PCB using screws; correct? 18:59

25 MR. JAFFE: Objection; form. 18:59

1 THE WITNESS: The attachment of PCBs to 18:59
2 standoffs and other mechanical hardware is commonly 19:00
3 used in designs. 19:00
4 MR. KIM: Okay. No further questions at this 19:00
5 time. 19:00
6 MR. JAFFE: No questions. 19:00
7 THE VIDEOGRAPHER: This is the end of today's 19:00
8 deposition of Mr. Gregory Kintz. We are off the 19:00
9 record at 7:00 p.m. 19:00
10 The total number of media used was eight and 19:00
11 will be retained by Veritext. 19:00
12 Thank you. 19:00
13 (WHEREUPON, the deposition ended 19:00
14 at 7:00 p.m.) 19:00
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